METHODS AND SYSTEMS FOR GENERATING A TERRAIN ELEVATION MAP IN A CARTESIAN FORMAT

ABSTRACT OF THE DISCLOSURE

Methods, systems, and computer program products for re-sampling terrain data in a

5   vehicle from latitude/longitude format into a Cartesian format. The present invention permits

incremental updates of the terrain elevation map as the vehicle travels. The present invention

includes memory for storing terrain elevation data, a navigation component for generating

aircraft position information, and a processor in communication with the memory and the

navigation component. The processor retrieves terrain elevation data from the memory based

10   on the generated aircraft position information, and generates a Cartesian coordinate-

referenced terrain elevation map based on the retrieved terrain elevation data and the aircraft

position information.